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July 26, 2010

Ms. LaDonna Castañuela  
Chief Clerk, MC-105  
Texas Commission on Environmental Quality  
P.O. Box 13087  
Austin, TX 78711-3087  
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*via Electronic Submission*

Re: TCEQ Docket No. 2009-0283-AIR; SOAH Docket No. 582-09-3008; *Application of White Stallion Energy Center LLC for State Air Quality Permit 86088, Prevention of Significant Deterioration Air Quality Permit PSD-TX-1160, Hazardous Air Pollutant Permit HAP-28, and Plantwide Applicability Limit PAL-48.*

Dear Ms. Castañuela:

Enclosed for filing in the above-referenced cause, please Sierra Club and No Coal Coalition's Exceptions to the Proposal for Decision.

Thank you for your attention to this matter. Please call me at (512) 637-9477 should you have any questions.

Sincerely,



Christina Mann

Enclosures

cc: Service List

**TCEQ DOCKET NO. 2009-0283-AIR  
SOAH DOCKET NO. 582-09-3008**

<b>APPLICATIONS OF WHITE</b>	<b>§</b>	<b>BEFORE THE TEXAS COMMISSION</b>
<b>STALLION ENERGY CENTER,</b>	<b>§</b>	
<b>LLC FOR STATE AIR QUALITY</b>	<b>§</b>	
<b>PERMIT 86088; PREVENTION OF</b>	<b>§</b>	
<b>SIGNIFICANT DETERIORATION</b>	<b>§</b>	
<b>AIR QUALITY PERMIT PSD-TX-</b>	<b>§</b>	
<b>1160 AND FOR HAZARDOUS AIR</b>	<b>§</b>	
<b>POLLUTANT MAJOR SOURCE</b>	<b>§</b>	
<b>[FCAA § 112(g)] PERMIT HAP-28</b>	<b>§</b>	
<b>AND PLANTWIDE</b>	<b>§</b>	
<b>APPLICABILITY LIMIT PAL-48</b>	<b>§</b>	<b>ON ENVIRONMENTAL QUALITY</b>

**SIERRA CLUB’S AND NO COAL COALITION’S EXCEPTIONS TO THE PROPOSAL  
FOR DECISION AND PROPOSED ORDER**

TO THE HONORABLE CHAIRMAN SHAW AND COMMISSIONERS GARCIA AND RUBINSTEIN:

COMES NOW, Protestants Sierra Club and No Coal Coalition (Protestants) and pursuant to the rules of the Commission present these exceptions and proposed revisions to the proposal for decision (PFD) submitted by Administrative Law Judges (ALJs) Keeper and Qualtrough. Protestants are generally supportive of the ALJs’ findings on BACT for PM, CO, and H<sub>2</sub>SO<sub>4</sub>. Protestants also support the ALJs’ findings that the record does not support issuance of the permit at this time due to concerns related to the ozone demonstration, coal dust effects, and inconsistencies in the HCl and HF Maximum Achievable Control Technology (MACT) reviews. Protestants present below selected exceptions to the PFD but do not waive any other potential exceptions or appeal points that exist in the record. The Findings of Fact and Conclusions of Law should be modified in accordance with the legal and evidentiary briefings below.

## OZONE

### ***The Record Evidence does not support the use of the Draft Ozone procedures.***

The ALJs found the Applicant's choice of ozone monitor to be improper, and recommended the Commission require White Stallion Energy Center, LLC (WSEC) to conduct a revised air dispersion modeling demonstration for ozone impacts. However, the ALJs found the use of the TCEQ's Draft Ozone Procedures (screening tool) is acceptable, although it was not done properly by the Applicant.

Protestants respectfully disagree that the Draft Ozone Procedures is an appropriate tool to evaluate ozone impacts. The ALJs did not base any findings on the adequacy of the draft ozone procedures as a regulatory tool based on the unique evidentiary record presented in *this* proceeding. Rather, the ALJs relied on the Blue Skies Decision and several prior commission orders implicitly blessing the use of the Draft Ozone Procedures. Protestants urge the Commission review the scientific merit of the draft ozone procedures based on the evidence presented in this case. The evidentiary record in this proceeding clearly demonstrates that the Draft Ozone Procedures is without scientific merit, is not understood by the Applicant or the ED staff, and has little application for any sort of meaningful evaluation of the potential ozone impacts from a large NO<sub>x</sub> dominated source such as a power plant. Neither the ALJs nor the Commission are held to any sort of precedent related to an earlier decision reached on a distinguishable evidentiary record.

Nevertheless, Protestants agree with the ALJs that it is clear that the ozone monitor chosen to complete step 1 of the draft ozone procedures is inappropriate from a regulatory perspective. The ALJs note the potentially questionable quality of the data generated by the monitor which is specifically not to be used for regulatory purposes. Protestants further point out

to the Commission that the physical location of the chosen monitor has no reasonable relationship to the ozone concentrations near the proposed facility or to the likely plume of ozone generated by a proposed facility emitting over 4000 tons per year of NO<sub>x</sub>. There is no persuasive evidence in the record that the monitor is actually representative as required in the Draft Ozone Procedures. In fact, there are ozone monitors that are closer to the proposed site than the one used by White Stallion, but these monitors were excluded because they are in non-attainment areas.<sup>1</sup> This decision is not appropriate per even the Draft Ozone Procedures. White Stallion's proposed site is just a few miles from the non-attainment area for ozone. The effect of adopting Applicant's reasoning and interpretation of the "guidance" is to allow an applicant to propose a huge new source of NO<sub>x</sub> literally across the county line from an ozone monitor in an adjacent county and choose to search out monitors *over a hundred miles away* to complete step 1 of the "Draft Ozone Procedures." Obviously, any of the ozone monitors a few miles northeast of White Stallion's proposed site (for example those in Brazoria County) would be closer than one in Aransas Pass or Corpus Christi.

***The requirements of current law and the evidence regarding the CAMx modeling was not adequately addressed by the ALJs***

Protestants respectfully except to the ALJs analysis of current law related to ozone impacts analysis. In relying on their understanding of current law, the ALJs slightly misstate TCEQ's authority to "establish its own methods, even allegedly outdated methods, for the evaluation of ozone precursors" and further state that these processes "have been accepted by EPA as part of the SIP."<sup>2</sup> There is nothing in the record that supports the statement that EPA has approved TCEQ's Air Quality Modeling Guidelines or the use of a screening technique purportedly based on EKMA as part of the SIP, or in any other way. To the contrary, EPA

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<sup>1</sup> Cross Examination of Kupper, Vol 2, Tr. Page 460

<sup>2</sup> PFD, page 18

expressly stated that per the PSD regulations and Appendix W, TCEQ and the applicants should work with the regional office and do something technically appropriate, rather than reliance on the simple screening technique. This is supported in TCEQ rules as well, at 30 TAC 116.160 (d).

This provision requires:

All estimates of ambient concentrations required under this subsection shall be based on the applicable air quality models and modeling procedures specified in the EPA Guideline on Air Quality Models, as amended, or models and modeling procedures currently approved by the EPA for use in the state program, and other specific provisions made in the prevention of significant deterioration state implementation plan. If the air quality impact model approved by the EPA or specified in the guideline is inappropriate, the model may be modified or another model substituted on a case-by-case basis, or a generic basis for the state program, where appropriate. Such a change shall be subject to notice and opportunity for public hearing and written approval of the administrator of the EPA.

Although TCEQ could, hypothetically create a new model or method to evaluate ambient concentrations of ozone, there has been no notice and comment and no coordination with EPA, as clearly required by TCEQ's own rules.

Moreover, in their reliance on *Blue Skies*, the ALJs ignore the presentation of evidence in this proceeding related to the technical merit of the ED and Commission's procedures. This evidence was not necessarily a part of the prior record before the judge in the *Blue Skies* case. The preponderance of the record evidence clearly supports a finding that EKMA is not adequate; was not understood by the Applicant<sup>3</sup> and has not been properly applied to create what is now known as the Draft Ozone Procedures<sup>4</sup>. You can't have a one size fits all EKMA approach for every

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<sup>3</sup> Kupper testifies the analysis seems identical to the now derided Scheffe Tables. Kupper on cross, Vol 2 Tr. Page 381.

<sup>4</sup> Tran Testimony Tr. Vol 4, Page 921-922; Page 1003

source in every area. In fact the *only* expert with any actual knowledge of EKMA testified that from a technical basis, EKMA cannot be the basis of the draft ozone procedures.<sup>5</sup>

In approving the use of the Draft Ozone Procedures over a potential requirement to evaluate photochemical modeling, the ALJs rely on their understanding of the status of the law rather than any detailed analysis of the technical merits of CAMx modeling presented by an expert witness. Protestants nevertheless respectfully disagree with the ALJs' brief summary of the CAMx modeling. The ALJs did not provide a comprehensive summary of the modeling conducted by Mr. Tran. Protestants recommend the Commission find that in fact, the single episode modeled shows that WSEC will cause AND contribute to air pollution in violation of the national ambient air quality standard (NAAQS) for ozone in the Houston-Galveston-Brazoria (HGB) air quality control region. For example, according to the expert's testimony, WSEC emissions will create new violations of the ozone NAAQS at other times or locations beyond just impact the daily maximum concentrations. As noted in Mr. Tran's report, White Stallion's emissions will cause new violations with contributions up to .9 ppb.<sup>6</sup> Also there will be impacts at the location of regulatory monitors modeled at regulatory monitors of approximately .9 ppb.<sup>7</sup>

### **BACT**

#### ***The record does not support Applicant's proposed BACT limits***

Protestants support the ALJs recommendations and findings that the proposed limits for H<sub>2</sub>SO<sub>4</sub>, PM total, PM filterable/PM<sub>10</sub>, PM<sub>2.5</sub>, CO are not BACT. The limits supported by the ALJs represent the least protective BACT limit supportable by this record. In many cases,

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<sup>5</sup> *Id.*

<sup>6</sup> Tr. at 968:4-974:15 (Tran on cross); White Stallion Ex. 713 (Summary of Tran's modeling results underlying his Table 4).

<sup>7</sup> Testimony of Khanh Tran, Tr. Vol. 4, Page 1030

Protestants also argue that a preponderance of the record evidence supports BACT limits which are more protective.

Protestants continue to respectfully disagree with the ALJs that this record supports their findings that proposed limits for NO<sub>x</sub>, SO<sub>2</sub>, and VOC represent BACT. Protestants address mercury (Hg), HCl, and HF, in the context of federal MACT standards rather than a state only BACT analysis.

Protestants agree with the ALJs that the TCEQ is not required to strictly follow the EPA's "top down" BACT methodology. Further, Protestants acknowledge TCEQ's long-held position that the Texas "three-tiered" BACT review process is, in theory, supposed to get to the same point as the EPA's top-down methodology. The BACT analyses here are nonetheless problematic because: first, the Texas three-tiered process, *as utilized by White Stallion* and the Applicant did not get to the same point as would EPA's top-down process. In addition, BACT is not simply about getting to the same point—the review itself, including the required documentation of the analysis<sup>8</sup>, is part of the BACT evaluation process, and, if lacking, can be grounds for remand or denial.<sup>9</sup>

Although the EPA agrees that TCEQ is not required to adopt the Top-Down methodology, EPA has not specifically found that TCEQ's implementation via RG 383 is equivalent to a Top Down analysis. Even though Texas is not required to implement EPA's Top-Down BACT methodology, Texas' interpretation of the federal definition must be consistent both with language of the definition *and* EPA's interpretations of the definition. Regardless of the methodology applied by a particular permitting agency to determine the technical

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<sup>8</sup> WSEC Ex. 119 at 22 ("It is important to thoroughly document all BACT decisions, especially those with unique and compelling considerations.") All citations to this exhibit reference the Draft Page number.

<sup>9</sup> *In re: Prairie State Generating Co.*, PSD Appeal No. 05-05, slip. op. 19 (EAB 2006).

practicability and economic reasonableness of a BACT proposal, any BACT determination that fails to satisfy the following fundamental concepts as defined by deficient:

First, a PSD applicant must consider the most stringent control technology (and associated emission limitation) that is available in conducting a PSD analysis.

Second, if the applicant proposes as BACT a control alternative that is less effective than the most stringent available, it must demonstrate to the State through objective indicators that case-specific energy, environmental, or economic impacts renders that alternative unreasonable or otherwise not achievable.<sup>10</sup>

## **NO<sub>x</sub>**

Protestants recommend that the Commission find that NO<sub>x</sub> emission limits achievable with SCR as the top control option represents BACT.<sup>11</sup> Because SCR is the top control option for NO<sub>x</sub>, it must be selected as the BACT control for NO<sub>x</sub>, unless it is not available or case-specific objective indicators demonstrate that collateral impacts render it unreasonable.<sup>12</sup> There is no question that SCR is available, as at least one catalyst vendor has indicated that it is willing to guarantee SCR for CFB facilities like WESC.

The ALJs reject SCR as BACT on three distinct grounds: 1) Protestant experts disagree about how WSEC should implement SCR; 2) SCR is not technically feasible; and 3) SCR is not economically reasonable. None of these findings is supported by a preponderance of the

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<sup>10</sup> 54 Fed. Reg. at 52,825

<sup>11</sup> SCR is top option (5 Tr. 1090:3-4)

<sup>12</sup> 54 Fed. Reg. at 52,825.



evidence. Moreover, the first rationale--even if established by a preponderance of the evidence--would not support a finding that SCR is not BACT.

***Experts Witnesses do not contradict each other***

ALJs reason that because Protestant witnesses differ on how SCR should be used on a CFB, and that “[t]his lack of agreement alone seems to support a finding that SCR is not clearly BACT for a CFB.”<sup>13</sup> The fact that two experts disagree about the most optimal way to implement SCR does not suggest that SNCR is preferable. SCR in either the hot-side or the tail-end position will provide a greater level of NO<sub>x</sub> control than Applicant’s proposed SNCR. Therefore ALJs’ conclusion based upon the supposed disagreement between Dr. Sahu and Mr. Powers does not follow. ALJs’ finding also overlooks contrary evidence, because while it is true that Dr. Sahu’s testimony focuses on hot-side SCR, and Mr. Powers’ testimony focuses on tail-end SCR there is no evidence in the record suggesting that Dr. Sahu believes tail-end SCR is infeasible or that Mr. Powers believes that hot-side SCR is infeasible.

In fact, Mr. Powers offered both prefiled and live testimony that hot-side SCR is technically practicable. In his prefiled testimony, Mr. Powers states:

There is no doubt that the hot-side low dust and the tail-end SCR configurations are technically feasible at WSEC. Hot-side, high dust SCR should be technically feasible at WSEC but is not presumptively feasible as are low dust and tail-end SCR in this application.<sup>14</sup>

Thus, while it is true that Mr. Powers focuses his prefiled testimony on tail-end SCR, he does not claim that hot-side SCR should not be used on a CFB. Later, during live testimony--in

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<sup>13</sup> PFD at 57.

<sup>14</sup> SC/NCC Ex. 200 at 13:12-15.

light of evidence produced by Applicant during discovery that a vendor was willing to guarantee hot-side SCR for WSEC's CFB after Mr. Power's prefiled testimony had been submitted--Mr. Powers testified that he was satisfied that no technical issues would prevent successful operation of SCR in the hot-side position at WSEC.<sup>15</sup>

### ***SCR is Technically Practicable***

ALJs rely on the following claims as bases for their finding that SCR is not technically practicable:

- Potential catalyst plugging due to calcium oxide in the flue gas;
- SCR has never been demonstrated on a full-scale fossil fuel-fired CFB;
- Increased energy use due to reheating the flue gas;
- Increase in overall emissions due to necessary reheating of flue gas; and
- Oxidation of SO<sub>2</sub> causing increases in PM<sub>10</sub> and sulfuric acid mist emissions and acid condensation.<sup>16</sup>

The first two points related to the technical practicability of SCR are not sufficient to support a finding that SCR is not technically practicable.

The claim that the small amount of calcium oxide that remains in the flue gas after it has passed through the bag house presents a risk of catalyst poisoning is based upon a single sentence in Mr. Shell's rebuttal testimony.<sup>17</sup> Without explanation, Mr. Shell's conclusory sentence flatly contradicts testimony offered by Mr. Hamilton, Mr. Powers, and the assurances of a leading catalyst vendor to the contrary.

Mr. Hamilton testified that the calcium oxide remaining in the exhaust stream after it has passed through the baghouse does not pose a technical impediment to SCR:

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<sup>15</sup> 4 Tr. 837:17-839:19.

<sup>16</sup> PFD at 55-56, 58.

<sup>17</sup> WS Ex. 500 at 34:3-5.

Q: (Judge Keeper)...[O]nce you leave the baghouse under either scenario that's up there, what you have in theory is a relatively clean plume of air that is clean with respect to the amount of carbon oxide particles that are in the air.

A: (Hamilton) Calcium oxide. ...

Q: (Judge Keeper) So at that point, is the question then that the technical impediments to having an SCR are lessened?

A: (Hamilton) Yes. Yeah.

Q: (Judge Keeper) Such that the kinds of problems that were identified in SC Exhibit 324, while they may not be eliminated, they're of less level concern because there's less of those particles in the air?

A: (Hamilton) Yeah. I got the sense--from my understanding, I would not see any technical impediment then.<sup>18</sup>

This testimony is confirmed by Mr. Powers' discussion with Nate White of Haldor

Topsoe:

Q: Did you ask Haldor Topsoe about the calcium oxide poisoning issue?

A: I told Mr. White of Haldor Topsoe he should assume that 100 percent of the particulate matter entering the tail-end SCR would be calcium oxide, and that this particulate level would be at the permit limit. We know what 100 percent of the particulate matter will not be calcium oxide but that is the most conservative assumption one can make. I asked that, if this is the case, would that pose a problem for Haldor Topsoe to guarantee its SCR. He said no. He said even if you assume 100 percent of the particulate matter at the permit limit is calcium oxide, the particulate concentration is so low it would not even be a consideration in the guarantee of SCR performance.<sup>19</sup>

Protestants disagree that the ALJs' second ground for finding that SCR is not technically practicable is supported by a preponderance of the evidence. While it is true that SCR has not been demonstrated on a full-scale fossil fuel-fired CFB, its technical practicability as a NO<sub>x</sub> control for fossil-fuel fired PC boilers is well-established. SCR is a technology that has "been around for decades."<sup>20</sup> SCRs have been used in the boiler outlet configuration on biomass-fired

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<sup>18</sup> 5 Tr. 1093:21-1094:20 (Hamilton).

<sup>19</sup> SC/NCC Ex. 200 at 17:32-42.

<sup>20</sup> *Id.* at 66.

plants and PC boilers for years.<sup>21</sup> Mr. Hamilton and Mr. Powers have testified that flue gas stream characteristics of a PC boiler burning coal and/or petroleum coke are similar to the stream characteristics of a CFB after passing through the baghouse and into the tail-end SCR.<sup>22</sup> A catalyst vendor contacted by Applicant's BACT expert said that it would be willing to guarantee either a hot-side or tail-end SCR on a CFB. Mr. Hamilton, Mr. Powers, and the representative of a leading catalyst vendor all claim that SCR is technically practicable for a CFB. Their considered opinion is far more probative on this issue than the conclusory testimony of Mr. Shell. Thus, the preponderance of the evidence indicates that SCR is technically practicable.

### ***SCR is Economically Reasonable***

There are only two pieces of evidence considered in the PFD that tend to support ALJs' finding that tail-end SCR is economically unreasonable:

- reheating exhaust gas will require additional operational costs;
- use of SCR will require increased energy consumption

This evidence is undisputed, but it is insufficient to support a finding that SCR is economically unreasonable. The mere fact that a more effective pollution control option is more expensive than a less effective control option says nothing about the economic reasonableness of the more expensive option.

Mr. Powers submitted prefiled testimony that tail-end SCR is economically reasonable, with an approximate overall cost-effectiveness of approximately \$3,700/ton.<sup>23</sup> Mr. Hamilton, the ED's BACT witness testified that Mr. Powers' economic analysis was based upon an

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<sup>21</sup> *Id.* at 68.

<sup>22</sup> 5 Tr. 1083:24-1084:2 (Hamilton); 4 Tr. 898:20-899:4 (Powers).

<sup>23</sup> SC/NCC Cross Ex. 200 at 19:14-16.

acceptable methodology<sup>24</sup> and that it demonstrated that tail-end SCR is not presumptively economically unreasonable.<sup>25</sup> ALJs did not find that Mr. Powers' cost analysis was improperly conducted or question his results. The mere fact that SCR will cost more than SNCR is insufficient to establish the conclusion that SCR is economically unreasonable. This finding is not supported by a preponderance of the record.

## **SO2**

Protestants respectfully recommend that Commission find that WSEC must consider clean fuels in its BACT analysis. We agree with EPA, who specifically commented on the issue of clean fuels, stating "we believe the TCEQ should analyze the possibility of cleaner fuels as an alternative primary fuel source..." and reminding TCEQ that must provide a "reasoned explanation demonstrating why the option of using PRB coals is not 'available' for this facility."<sup>26</sup> As we noted in our closing arguments, the plain language of the federal definition of BACT indicates that production processes, (e.g. IGCC and pulverized coal boilers) and clean fuels should be evaluated as part of a BACT review. While EPA has allowed applicants to exclude consideration of certain production processes and clean fuels in cases where implementation of those alternatives would constitute a redefinition of the proposed source, such exclusion must be scrutinized by the permitting agency and justified by case specific facts.<sup>27</sup> According to the EPA and several courts, the design of a facility is redefined when the adoption

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<sup>24</sup> 5 Tr. 1081:8-21 (Hamilton).

<sup>25</sup> 5 Tr. 1110:25-1111:12 (Hamilton)(emphasis added).

<sup>26</sup> February 10, 2010, letter from EPA to Richard Hyde, P.E., EDF Ex. 133 page 5.

<sup>27</sup> See EDF Ex. 133.; See also *In re: Desert Rock Energy Company*, PSD Appeal Nox. 08-03, 08-04, 08-05 and 08-06, slip op. at 76 (EAB Sep. 24, 2009); *In the Matter of American Power Service Corporation, Southwest Electric Power Company*, Petition Number VI-2008-01, slip op. at 8. (Dec. 15, 2009); *In the Matter of Cash Creek Generation, LLC*, Petition Nos. IV-2008-1 & IV-2008-2, slip op. 7-8 (Dec. 15, 2009)(Citing *Desert Rock*, slip op. at 63-72, 76).

of a control technology changes the objective or purpose of the facility.<sup>28</sup> The purpose of a proposed facility is determined by the description in the application submitted for the proposed facility, so long as the purpose or design is objectively discernable. The record does not reflect that consideration of cleaner fuels would somehow change the purposes of the facility.

Likewise, wet scrubbing is technically practicable. Wet scrubbers are in operation on numerous Texas coal-fired power plants, including W.A. Parish Unit 8, CPS Energy (San Antonio), J.K. Spruce Unit 1, and Luminant Martin Lake Units 1, 2, and 3.<sup>29</sup> In fact, wet scrubbers have a much longer and more extensive operating history than dry scrubbers.<sup>30</sup>

A dry scrubber achieves an SO<sub>2</sub> removal efficiency of only 90-92 percent.<sup>31</sup> A wet scrubber can achieve SO<sub>2</sub> removal efficiencies of 98 to 99 percent.<sup>32</sup> A control train consisting of limestone injection and a wet scrubber would be capable of achieving an SO<sub>2</sub> removal efficiency of 99.9 percent, resulting in a lower emission rate than that proposed.<sup>33</sup> Such an emission rate would presumptively represent BACT. The record does not support exclusion of even consideration of the emission limits achievable with the use of a wet scrubber or cleaner fuels.

### **Particulate Matter (PM)**

Protestants do not except to the ALJs primary recommendations regarding BACT for PM<sub>10</sub> and Total PM. Protestants recommend that the Commission adopt the findings that the emission limits of .010lbs/MMBtu for PM<sub>10</sub> and .016lbs/MMBtu for Total PM represent BACT.

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<sup>28</sup> *Utah Chptr. of the Sierra Club v. Air Quality Bd.*, 2009 UT 76 at \*P40-\*P43 (Utah 2009).

<sup>29</sup> SC/NCC Ex. 200 at 21:20-22.

<sup>30</sup> *Id.* at 22:38-39.

<sup>31</sup> ED Ex. 17 at 43.

<sup>32</sup> SC/NCC Ex. 200 at 21:3-4; ED Ex. 16 at 7.

<sup>33</sup> *Id.* at 21:12-14.

The alternative recommendations are not supported by a preponderance of the evidence in this record, as evidenced by the ALJs recommendations. Protestants disagree that the PM<sub>10</sub>-PM<sub>2.5</sub> surrogacy was properly applied in this proceeding. Nevertheless, Protestants do not except to a finding by the Commission that BACT for PM<sub>2.5</sub> is equivalent to .016 lbs/MMBtu

## **CO**

Although Protestants continue to recommend an emission limit of .05lb/MMBtu based upon use of a tail end SCR with oxidation catalyst; in no event should WSEC be exempted from any short term limit for CO. CO is measured continuously with a CEMS (see and should, at a minimum, be required to meet a 30 day rolling average limit of .10 lbs/MMBtu for CO. The record clearly supports this limit for both a 30 day and annual rolling average.

## **H<sub>2</sub>SO<sub>4</sub>**

Protestants do not except to the ALJs recommendation that the limit of 0.0045 lb/MMBtu be adopted as BACT for H<sub>2</sub>SO<sub>4</sub> for both fuels.

## **MACT**

***The record does not support the use of the surrogates chosen for all HAPS.***

Protestants disagree with the ALJs' findings that the record in this proceeding supports the use of surrogates. In order to rely on a surrogate, the record must agency and the applicant must satisfy the following 3 part demonstration: (1) the surrogate and the class of pollutants it represents are invariably present together in the emissions, (2) the applicable control technology indiscriminately captures both the surrogate and the represented pollutants, and (3) these controls are the only means by which the facility can achieve reductions in the pollutants. *Sierra Club v.*

*EPA*, 353 F.3d 976, 984 (D.C. Cir. 2004)(hereinafter *Sierra Club I*), (citing *Nat'l Lime*, 223 F.3d at 639). The record does not contain a showing for *each* HAP purportedly covered by a surrogate. Therefore, the record does not support the use of the surrogates chosen for all HAPS.

***The record does not support identification of the “Best Controlled Similar Sources” for all HAPS.***

The record does not support the findings related to MACT because the “Best Controlled Similar Sources” were not properly identified as required by Section 112. The law requires that, at a minimum, a MACT limit “shall not be shall not be less stringent than the emission control which is achieved in practice by the best controlled similar source.”<sup>34</sup> Therefore, for each HAP, the agency and applicant must identify and make a record of the individual best performing similar source and determine the emission performance that the source achieves *in practice*. The proposed source must then be required to at least meet the level of performance that the identified source actually achieves. This is called a “floor,” because the source being permitted cannot drop below this level of emissions control, regardless of the cost, technical or economic feasibility, or achievability.<sup>35</sup>

The ALJs find that it is appropriate to only consider other CFBs as similar sources for MACT because:

Flue gases from CFBs and PCs have different concentrations of pollutants and different physical properties. Furthermore, the type of fuel burned has a major impact on the amount and type of pollutants emitted from the facility. Therefore,

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<sup>34</sup> 42 U.S.C. 7412(d)(3); 40 CFR 63.43(d)(1).

<sup>35</sup> *Nat'l Lime Assoc. v. EPA*, 233 F.3d 625, 640 (D.C. Cir. 2000).



it is important that similar facilities burn the same fuel using the same combustion technology.<sup>36</sup>

Protestants disagree with the ALJs and recommend the MACT application be denied or remanded so that it can be conducted in accordance with the federally applicable MACT standards. Similar source is defined as “a stationary source or process that has comparable emissions and is structurally similar in design and capacity to a constructed or reconstructed major MACT source such that the source could be controlled using the same technology.”<sup>37</sup>

The rule-making discussion goes on to clarify that the reference to “comparable emissions” addresses the manner in which the source releases HAPs and is meant to distinguish, for example, vent or stack discharges,” from “[e]quipment leaks” or “fugitive emissions,” and from “evaporation and breathing losses.”<sup>38</sup> It does not mean that two sources have to have the exact same emission rates, volumes, or temperatures to be similar. Thus, the term “similar source” is meant to broaden, rather than limit, the MACT-floor analysis.<sup>39</sup>

In fact, U.S. EPA has previously and specifically declined to consider pulverized and circulating fluidized bed coal-fired power plants to be separate sources for the purposes of MACT.<sup>40</sup> In addition, the contention that cleaner versions of the fuel for a facility need not be evaluated as part of a MACT determination has been rejected by a federal court with regards to

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<sup>36</sup> See PFD, Page 98.

<sup>37</sup> 40 C.F.R. § 63.41.

<sup>38</sup> *Id.*

<sup>39</sup> *Id.*

<sup>40</sup> Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 70 Fed. Reg. 28,606, 28, 613 (May 18, 2005).

the MACT standards for cement kilns.<sup>41</sup> Since then, U.S. EPA has set proposed MACT limits for cement kilns that are based on the use of cleaner forms of clay.

Therefore, similar sources for purposes here include any circulating fluidized bed or pulverized coal power plant, as any such facility would have “comparable emissions” that could be controlled through the use of the “same control technology.” Inappropriately limiting the definition of similar source in the MACT regulations would have the impermissible effect of eliminating potentially available technologies and processes that could significantly reduce HAP emissions and short-circuiting the careful search for ways to achieve the maximum reductions in HAP emissions that are required by MACT.

***The record evidence does not support the Mercury (Hg), PM, CO, HCl, or HF limits proposed as MACT.***

In addition to the improper use of surrogates and narrowing of similar sources, the record demonstrates that the MACT floor was not properly identified. Any case-by-case MACT analysis must start with the proper determination of a MACT floor. A MACT floor for a new source must be based on the emissions levels “achieved” by the best performing source. It is unacceptable to simply assume that permitted levels in the RBLC reflect achievable levels for purposes of a MACT floor analysis. *Northeast Maryland Waste Disposal Auth. v. EPA*, 358 F.3d 936, 953-54 (DC Cir. 2004) (vacating MACT floor where EPA relied on permit limits with “no evidence that the [state] permit levels reflect the emission levels of the best performing plants”). It is legally indefensible to rely solely on permit limits and vacated standards, rather than actual performance data of emission levels achieved to identify the MACT floor. Actual test data referenced by expert witnesses was improperly dismissed by the ALJs. As stated in our closing

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<sup>41</sup> *Sierra Club II*, 479 F.3d at 881-82 (holding that EPA erred in not evaluating the use of clearer forms of clay when establishing MACT standards for cement kilns).

arguments, Protestants re- urge the Commissioners deny or remand the MACT application to the ED so that a review that complies with federally required legal standards may be conducted.

### **PAL**

Protestants understand that the ALJs did not find a legal issue to address regarding the legal sufficiency of a PAL because EPA has not issued final disapproval of the PAL. To be clear, Texas PALs are NOT part of the SIP. PALs have never been approved by EPA and are not sanctioned in any manner for use on any permits for activities which also require federal authorizations. As the ALJs note, EPA has proposed a disapproval of Texas' PAL program. EPA did so because the program is inconsistent with federal law. (See, EDF Ex. 128: 74 Fed. Reg. 48,467, 48,469 (Sept. 23, 2009)). If at some time in the future the PAL program is expressly approved by EPA, then TCEQ may grant PALs for permits with federal authorizations.

### **Transcript Costs**

Although Protestants benefited from the transcript, Applicant has the burden and is responsible for the entire permitting project's existence. Protestants recommend that if the Applicant is not willing or able to pay the costs of the entire transcript, then costs should be divided evenly between the sides. Therefore, Applicant would be responsible for half of the transcript costs, while Protestants and EDF would share the other half of costs (25 % each).

### **Remand or denial is required**

The ALJS recommend that the Commission address the noted deficiencies by require[ing] WSEC to conduct a revised air dispersion modeling regarding ozone, provide an analysis addressing the health effects review of coal dust, and clarify the appropriate emissions

limits for HCl and HF, if necessary.. [with a]... 180-day deadline for the submission of this additional information.<sup>42</sup> Protestants agree that if the Commission does not deny this permit (although it has the authority to do so), it must re-open the record to further evaluate the coal dust, HCl/HF MACT issue, and the ozone modeling demonstration. However, Protestants are concerned that the ALJs have not flushed out the required process to ensure further party participation. Re-opening the record must occur in the form of a remand to the ED, and then further public participation at SOAH to review any additional evidence submitted by the Applicant and any ED analysis or recommendations to the Commission. In the alternative, the Commission could remand to SOAH for additional evidence and findings as allowed by 30 TAC §80.265.

Respectfully Submitted,

**ENVIRONMENTAL INTEGRITY PROJECT**

By:

A handwritten signature in cursive script that reads "Christina Mann". The signature is written in dark ink and is positioned above a solid horizontal line.

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<sup>42</sup> PFD, page 119.